Claim

I claim:

1. A support assembly for supporting a conveyor belt in a trough-shape, said support assembly being mounted on a base and being accessible from at least one side of the conveyor belt, comprising:

    a first guide element mounted on a first frame in an inclined position for supporting a one side of the conveyor belt, said first frame disposed on top of the base and removable from the one accessible side of the conveyor belt; and

    a second guide element mounted on a second frame in an inclined position for supporting another side of the conveyor belt, said second frame disposed on top of the base and removable from the one accessible side of the conveyor belt;

    wherein the first frame and second frame are aligned in a row extending generally transverse to the axis of the conveyor belt, said first frame and second frame being aligned and being removable from the one accessible side of the conveyor belt.

2. The support assembly of claim 1, wherein the first and second guide elements each comprise one of a roller, a slider bar and a bearing block.

3. The support assembly of claim 1, wherein the first and second guide elements each comprise at least one roller.

4. A support assembly for supporting a conveyor belt in a trough-shape, said support assembly being mounted on a base beneath the conveyor belt and having an accessible side and an inaccessible side comprising:

a first guide element mounted on a first frame in an inclined position adjacent the accessible side, said first frame disposed on top of the base and removable from the accessible side of the conveyor belt;

a second guide element mounted on a second frame in an inclined position adjacent the inaccessible side, said second frame disposed on top of the base and removable from the accessible side of the conveyor belt; and

a ramp for supporting the second frame beneath the belt adjacent the inaccessible side, said ramp being slidable on the base between a disengaged position, in which the second guide element is moved outwardly and away from the belt, and an engaged position, in which the second guide element is positioned beneath the belt,

wherein, upon displacement of the ramp to the disengaged position, a clearance is formed between the second guide element and the conveyor belt that permits movement of the second frame and second guide element down the ramp and beneath the conveyor belt for removal from the accessible side of the conveyor belt.

5. The support assembly of claim 4, wherein the first and second guide elements each comprise one of a roller, a slider bar and a bearing block.

6. The support assembly of claim 4, wherein the first and second guide elements each comprise at least one roller.

7. A support assembly for installation beneath a conveyor belt having an accessible side, said support assembly comprising:

a track beneath the conveyor belt and extending generally

transverse to the orientation of the conveyor belt;

a first guide element mounted in an inclined position beneath the belt, said first guide element slidably supported on the track and removable from the accessible side of the conveyor belt; and

a second guide element mounted in an inclined position beneath the conveyor belt, said second guide element slidably supported on the track and removable from the accessible side of the conveyor belt;

wherein the first and second guide elements are aligned along the track in a generally vertical orientation and are slidable beneath the belt to facilitate removal of the guide elements from beneath the belt.

8. The support assembly of claim 7, wherein the first and second guide elements each comprise one of a roller, a slider bar and a bearing block.

9. The support assembly of claim 7, wherein the first and second guide elements each comprise at least one roller.

10. A support assembly for installation beneath a trough-shaped conveyor belt supported in a trough-shape and having an accessible side and an inaccessible side, said support assembly comprising:

a track beneath the conveyor belt and extending generally transverse to the orientation of the conveyor belt;

a first guide element mounted in an inclined position beneath the belt, said first guide element slidably supported on the track and removable from the accessible side of the

conveyor belt;

a second guide element mounted in an inclined position beneath the conveyor belt adjacent the inaccessible side of the conveyor belt, said second guide element slidably supported on the track and removable from the accessible side of the conveyor belt; and

a ramp for supporting the second guide element beneath the conveyor belt adjacent the inaccessible side, said ramp being slidable on the track between a disengaged position, in which the ramp and second guide element are movable outwardly and away from the belt, and an engaged position, in which the ramp and second guide element are positioned beneath the belt,

wherein, upon moving the ramp to the disengaged position, a clearance is formed between the second guide element and the conveyor belt that permits movement of the second guide element down the ramp and along the track to facilitate removal of the second guide element from the accessible side of the conveyor belt.

11. The support assembly of claim 10, wherein the first and second guide elements each comprise one of a roller, a slider bar and a bearing block.

12. The support assembly of claim 10, wherein the first and second guide elements each comprise at least one roller.

13. A support assembly for installation beneath a conveyor belt supported in a trough-shape and having an accessible side and an inaccessible side, said support assembly comprising:

a track beneath the conveyor belt, said track extending

generally transverse to the orientation of the conveyor belt;

a first guide element mounted in an inclined position beneath the belt, said first guide element slidably supported on the track and removable from the accessible side of the conveyor belt;

a second guide element mounted in an inclined position beneath the conveyor belt adjacent the inaccessible side of the conveyor belt, said second guide element slidably supported on the track and removable from the accessible side of the conveyor belt;

a third guide element mounted in a generally horizontal position beneath a central portion of the conveyor belt between said first guide element and said second guide element, said third guide element being pivotally connected to said second guide element to facilitate installation and removal of the second and third guide elements as a unit.

14. The support assembly of claim 13 comprising a ramp for supporting said second guide element beneath the conveyor belt adjacent the inaccessible side, said ramp being slidable on the track between a disengaged position, in which the ramp and second guide element are movable outwardly and away from the belt, and an engaged position, in which the ramp and second guide element are positioned beneath the belt, wherein, upon moving the ramp to the disengaged position, a clearance is formed between the second guide element and the conveyor belt that permits movement of the second guide element down the ramp and along the track to facilitate removal of the second guide element and third guide element from the accessible side of the conveyor belt as a unit.

15. The support assembly of claim 13, wherein each guide element comprises one of a roller, a slider bar and a bearing block.

16. The support assembly of claim 13, wherein each guide element comprises at least one roller.

17. The support assembly of claim 13, wherein the second guide element is pivotally connected to said third guide element to facilitate installation and removal of the first, second and third guide elements as a unit.